



Actuaries and Consultants

700 Central Expressway South Suite 550 Allen, TX 75013

972-850-0850 lewisellis.com

April 12, 2021

Green Mountain Care Board State of Vermont 144 State Street Montpelier, VT 05602

Re: Blue Cross and Blue Shield of Vermont Q3 2021 Large Group Filing (SERFF # BCVT-132713612) and The Vermont Health Plan Q3 2021 Large Group Filing (SERFF # BCVT-132713919).

The purpose of this letter is to provide a summary and recommendation regarding the proposed Large Group Filings for Blue Cross and Blue Shield of Vermont (BCBSVT) and The Vermont Health Plan (TVHP) (collectively, "the filing") and to assist the Board in assessing whether to approve, modify, or disapprove the request.

Filing Description

- BCBSVT is a non-profit hospital and medical service corporation. BCBSVT provides coverage to
 individuals, small and large group employer, Medicare enrollees Vermont. TVHP is a licensed health
 maintenance organization (HMO) and for-profit subsidiary of Blue Cross Blue Shield of Vermont.
 TVHP provides large group coverage to employers in Vermont.
- 2. This filing establishes the formula, manual rate and accompanying factors that will be used for Large Group renewals. This filing includes support for key assumptions, such as trend, benefit relativities, administrative costs, aggregate stop loss, and large claim factors. The overall impact of this filing was estimated based on the previously approved factors from the prior filings.
- 3. This filing addresses BCBSVT and TVHP Insured and Cost Plus large groups. Throughout the filing and this report, BCBSVT and the related company, TVHP, are referred to collectively as BCBSVT, except when specified. There are approximately 3,400 subscribers and 5,800 lives affected across 36 groups for the BCBSVT Q3 2021 Large Group filing and the corresponding TVHP filing.
- 4. The most important component of any group's premium is their past claims experience. Group-level premiums for coverage years beginning 1Q 2022, for example, will be based on the most current experience available at the time. For this reason, no group's actual premium increase pursuant to this filing is currently known.
- 5. As initially filed, the average premium change of a fully insured group was approximately -0.6%¹, or roughly -\$4.05 PMPM, itemized below.
 - a. Change to Projected Claims: +0.6%

¹ The itemized changes are multiplicative and may not add up to the total.

- b. Change from Projected Pharmacy Rebates: -2.4%
- c. Change in Administrative Charges: +1.2%

During the review of this filing, BCBSVT discovered an error in the development of the administrative costs. With a correction for this change, the average premium change is -1.7%, or roughly -\$11.48, itemized below:

- a. Change to Projected Claims: +0.6%
- b. Change from Projected Pharmacy Rebates: -2.4%
- c. Change in Administrative Charges: +0.1%

It should be noted that the actual rate change, even averaged across all groups, may differ from this level. This is because the filed rating formula incorporates experience which has not yet occurred. If claims are different from current expectations during 2021, this information will flow through to premiums when groups renew their coverage.

6. The actual premium increase experienced by a particular group will vary from the average of -1.7%. Each group's rate increase or rate decrease will consider their recent claims experience, changes in the distribution of members enrolled, and changes in benefit. A newly formed large group would experience 1Q2022 premiums that were approximately 1.7% lower than a similar newly formed large group in 1Q2021.

Standard of Review

Pursuant to Green Mountain Care Board (Board) Rule 2.000 Health Insurance Rate Review, this letter is to assist the Board in determining whether the requested rate is affordable, promotes quality care, promotes access to health care, protects insurer solvency, and is not unjust, unfair, inequitable, misleading, or contrary to the law, and is not excessive, inadequate, or unfairly discriminatory.

Summary of the Data Received

BCBSVT provided the proposed methodology used to calculate the Insured and Cost Plus large group premiums for groups renewing after approval of this filing. The Company provided exhibits and support for each component of the premium development, including trend, administrative costs, contribution to reserves, aggregate stop loss and risk charge factors, network changes and large claim factors.

For medical trend development, the Company used claims incurred between March 2016 and February 2020. The data includes claims from BCBSVT Cost Plus groups, BCBSVT Administrative Services Only (ASO) groups with less than 1,001 members, BCBSVT Insured Small and Large Groups including small groups enrolled in Qualified Health Plans, BCBSVT insured AHP's, and The Vermont Health Plan (TVHP) Insured Small and Large Groups. BCBSVT and TVHP cover substantially similar populations under similar benefit packages. The Company felt that combining these homogeneous populations created greater consistency and credibility within the trend factor development. Adjustments were made to the data to reflect network differences between the two companies.

Trend for members who have Medicare as their primary coverage was analyzed separately.

Filing Analysis

1. Better than Expected Claims Experience: For the combined BCBSVT and TVHP block that is used for rate development, the projected claims are expected to increase only 0.6% over what was assumed in the prior filing, despite annual paid trend of 7.7%. This implies that the paid claims in the experience period were approximately 7% lower than what was anticipated in the most recent large group filing.



This accounts for the proposed negative average rate change. The claims used were incurred from July 2019 through September 2020, with the period March 2020 through May 2020 removed due to the disruptions to utilization patterns resulting from the COVID-19 pandemic.

2. *Medical Trend Development:* Medical trend varies by company and plan type due to contracting differences. For all products combined, the Company is requesting a total allowed² medical trend of 5.9% per year. This total allowed medical trend amount is broken down into 5.6% for hospital claims, 3.6% for professional claims, and 13.8% for outpatient drugs.³

Utilization and Intensity

The Company normalized the allowed costs to remove the impact of unit cost changes and to isolate the change in utilization and intensity of services. To reduce fluctuation and capture only trend, the Company also removed outlier claimants. This data was then analyzed by using exponential regression and other methods. It is important to note that the experience period, ending in February 2020, excludes any meaningful impact from COVID-19.

The Company chose a utilization trend of 0.6% per year for facility claims and 1.1% for professional and ancillary claims. These average to an overall non-drug medical utilization trend assumption of about 0.8% per year.

L&E reviewed the data and analysis provided by the Company, which includes:

- Year-over-year rolling PMPMs;
- Exponential regressions; and
- Times series analysis.

BCBSVT has consistently relied on historical utilization changes to project future utilization changes in past filings, using various regression algorithms. Each of the different methods produced varied results, which indicates uncertainty in the projected utilization trends. Regression on various time periods produce the following results:

Regression Time Period	Annual Facility Trend	Annual Professional Trend	Annual Combined Trend
March 2016 through February 2020	0.9%	2.9%	1.5%
March 2017 through February 2020	0.5%	2.0%	1.0%
March 2018 through February 2020	1.4%	1.3%	1.4%

We have reviewed the regression analysis and considered the possibility of random fluctuation in the results. The data suggests that the underlying trend over the last 4 years has variability such that a 90% confidence interval would be from about 0.0% to 2.9% per year.⁴ We believe BCBSVT's trend assumption is reasonable and do not recommend any changes at this time.

⁴ Values near the middle of the range should be understood to be more likely than those on the edges of the range.



² Allowed cost trends are based on charges that reflect the total amount of claims paid by both the carrier and the policyholder. Paid trends reflect the actual claim payment made by the carrier only. Paid trends are usually higher because the member's share of the cost is often limited to fixed copays which do not increase with cost trend.

³ Many specialty drugs, such as certain chemotherapy treatments, are often covered under a policy's medical benefit. These drugs are separate from the Rx experience and trend discussed in the next section but have exhibited similarly high trend in recent years.

Unit Cost

The unit cost trend for medical costs is projected to be 4.2% based on an analysis of the hospital budget increases implemented in recent years as well as other providers in the BCBSVT service area. By segment, this increase varies as shown below:

Market Segment	Annual Unit Cost Trend
BCBSVT Managed Care	4.2%
BCBSVT Non-Managed Care	4.3%
TVHP Managed Care	4.3%
Combined	4.2%

This projection includes a 4.7% increase for Vermont facilities and providers impacted by the GMCB's hospital budget review and an increase of 3.7% for other facilities and providers. This increase of 4.7% assumes that hospital budget submissions in Fall 2021 will return to levels similar to Fall 2019, rather than the slightly elevated level in 2020 that resulted from COVID-19.

Unit cost increases for providers outside the BCBSVT service area were derived from the Blue Trend Survey.⁵

L&E reviewed the confidential support for the unit cost trend that was provided by the Company, and it appears to be reasonable and appropriate. L&E does not recommend any changes to the medical unit cost trend assumptions.

Pharmaceuticals Processed through Medical Benefit

Consistent with last year's filing, BCBSVT has isolated claims related to pharmaceuticals covered by the medical benefit (as opposed to pharmaceuticals dispensed in a retail pharmacy setting). These prescriptions are differentiated from others due to their being applicable to medical deductibles and cost sharing rather than the prescription drug benefits. This is often because they are dispensed in an outpatient medical facility. For simplicity, we will refer to these as "outpatient drugs" in this report. These claims are treated as a special carve-out in the determination of medical trend. The trend for this category is not split into utilization and unit cost components.

Historical costs for outpatient drugs were provided by incurral month for the last several years and shown to be increasing at a steady rate. The Company assumed an 13.8% increase in cost per year for outpatient drugs. The average increase for recent twelve-month periods is shown below:

Year Ended	Annual Cost Increase – Outpatient Drugs
Feb 2020	8.4%
Feb 2019	15.5%
Feb 2018	5.4%

The assumed 13.8% increase is on the high end of outpatient Rx trends observed in recent years but is reasonable in light of the historical variability. BCBSVT's clinical experts believe elevated trends will occur due to new drugs, such as Ocrelizumab, which were not available during the experience period. This higher trend rate is applied instead of the unit cost and utilization trends described above for the roughly 10% to 15% of medical cost associated with outpatient drugs.

⁵ The Blue Trend Survey is a proprietary and confidential dissemination of the BlueCross BlueShield Association.



Total Allowed Medical Trend

With the combination of the utilization and intensity trends, the unit cost trend, and the outpatient drugs trend, the total medical allowed trend in the filing is 5.9%. These relationships are shown in the table below:

Medical Cost Type	Cost Trend	Utilization Trend	Total Allowed Trend
Facility	5.0%	0.6%	5.6%
Professional	2.5%	1.1%	3.6%
Total without Outpatient Rx	4.2%	0.8%	5.0%

Medical Cost Type	Total Allowed Trend
Total without Outpatient Rx	5.0%
Outpatient Rx	13.8%
Total	5.9%

Actual results will vary from the projected amount due to random fluctuations and unpredictable changes in the market. L&E's estimated range for the total allowed medical trend is 3.6% to 7.9%. Each of the numbers within the estimated range are not equally likely, that is the trends on the low and high end are not as likely to occur as the trends in the middle of the range.

BCBSVT's assumed total allowed medical trend of 5.9% is reasonable in light of the known and likely hospital budget increases, as well as the consistent pattern of increasing utilization in recent years. It falls very near the middle of L&E's estimated range, which does not consider the clinical input that went into the outpatient drug projection. We do not recommend any changes to the medical trend assumptions in this filing.

- 3. *Pharmacy Trend Development:* The Company is requesting a total allowed pharmacy trend, including the impact of contracting changes with the Pharmacy Benefit Manager, of 11.0%. This aggregate assumption is composed of the following components:
 - Non-specialty utilization trend
 - Generic cost trend, separately for new and established generics
 - Brand cost trend, separately for new and established brands
 - Impact of brand drugs going generic
 - Specialty trend
 - Vaccines, OTC, etc.

The Company modeled the costs for generic and brand drugs separately; however, they did combine the data to analyze utilization patterns. A separate adjustment was then made to incorporate the impact of brand drug patent expiration, which results in a decrease in cost as lower-cost generics become available.



The Company modeled separately the total PMPM trends for specialty drugs due to their relatively low utilization and high cost nature. The following table shows the results of the Company's analysis and the requested 11.0% overall allowed pharmacy trend.

Pharmacy Trends	Cost Trend	Utilization Trend	Total Annual Trend ⁶
Generic	1.1%	3.5%	5.6%
Brand	7.1%	3.5%	10.5%
Brands Going Generic	- 48.4%	3.5%	-46.5%
Total Without Specialty	1.0%	3.5%	4.5%

Pharmacy Trends	Total Annual Trend ⁷
Total Without Specialty	4.5%
Specialty	19.6%
Total	11.0%8

The Company calculated unit cost trends of 1.1% for generic and 7.1% for brand drugs. Both of these are consistent with recent trends in the observed changes in cost for these categories, as demonstrated in the Company's filing exhibits. Unlike in past filings, generic drugs were adjusted slightly to reflect the change in mix between established generics and new generics, which tend to have different average costs. A similar adjustment was made to brand drugs.

When the patent expires for a brand drug, lower-cost generic alternatives become available. The Company projected the quantity and reduced cost for drugs which will become genericized during the projection period. These drugs are assumed to reduce in price by 48.4% due to the availability of generic alternatives.

L&E believes the method of projecting brands going generic is reasonable and appropriate. The assumed unit cost trends for generic, brand, and brand-going-generic are reasonable.

The utilization trend for non-specialty drugs is projected to be 3.5% per year. This is based on historical utilization rising steadily from past levels during 2019 and 2020, even after the one-time effects from COVID-19 are taken into account. The 12-month increase in the year ending in August 2020, adjusted for COVID-19, is 4.0%. The increase in the year ending August 2019 was 1.1%. Due to the consistency between the projected utilization trend and historical utilization trend, we believe the proposed non-specialty utilization trend is reasonable.

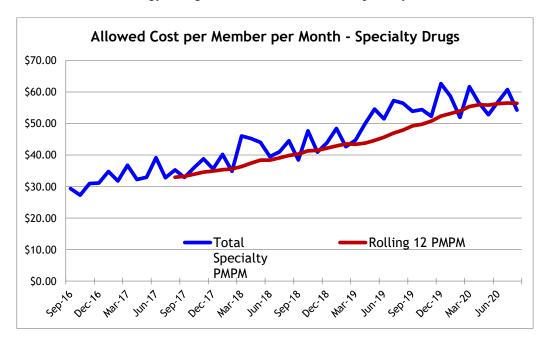
⁸ This figure includes the impact of contracting adjustments in addition to the trends by drug tier.



⁶ The total trend may not equal the combination unit cost and utilization trend due to the additional adjustment for projected mix between new and established generics/brand.

⁷ The total trend may not equal the combination unit cost and utilization trend due to the additional adjustment for projected mix between new and established generics/brand.

Due to their high cost and low frequency, specialty drugs are projected based on their allowed cost, without splitting into unit cost and utilization. We agree with the Company's decision to analyze specialty cost trend this way, as the utilization trend would be difficult to assess given the low frequency and wide variance in unit costs. Unlike in prior filings, the Company has not carved out particular high-cost drugs. The Company explained that the impact of this additional complexity was limited, and they have elected to group all specialty claims into a single category for the purpose of trend development. L&E believes this methodology change is reasonable. Historical specialty trend is shown below:



Historical costs have increased at a steady, high rate for several years. The years ending in August of 2018, 2019, and 2020 exhibited cost increases of 21.0%, 20.2%, and 17.6% respectively. The assumed specialty trend is 19.6%, based on regression analysis of historical claims. The Company's selection of a 19.6% trend assumption is reasonable in light of the historical increases in cost observed.

The Company projects overall pharmacy allowed trend to be about 11.0% per year. This reflects not only unit cost and utilization changes but also contracting changes with the PBM (Pharmacy Benefit Manager). This total pharmacy allowed trend is reasonable in aggregate as well as when analyzed by the components described above.

4. Total Allowed Trend: Total allowed costs are projected to increase at 6.8% per year.

Category	Allowed Trend	Approx. Percent of Claims
Medical	5.9%	81%
Rx	11.0%	19%
Total	6.8%	100%

L&E took a long-term view of historical claims and estimated a likely range of annual allowed trends between 5.4% and 9.0%. BCBSVT's trend development, which considers other factors and short-term changes, produced an overall trend factor that is slightly lower than the midpoint of L&E's range. This provides additional validation that BCBSVT's trend development is producing a reasonable result overall.



5. Leverage Adjustments to Allowed Trends: The Company analyzed allowed trends, as this is the clearest way to view changes in cost and utilization. However, plan liability increases at the paid trend rate, not the allowed trend rate. Therefore, an adjustment was made to the calculated allowed trends to reflect expected paid trends given the mix of benefits enrolled in the program.

The leveraged trend values were determined using the Company's Benefit Relativity models⁹ by calculating the change in paid claims with and without the allowed trends. The paid trends are summarized in the table below.

	Allowed Trends	Paid Trends	Approx. Percent of Claims
Medical	5.9%	6.8%	81%
Rx	11.0%	11.6%	19%
Total	6.8%	7.7%	100%

The methodology of using the Benefit Relativity models to estimate the impact on paid claims with and without the allowed trend is consistent with last year's filing. The approach that the Company used to adjust allowed trends to paid trends is reasonable and appropriate.

- 6. Administrative Costs: Administrative costs were projected based on past administrative costs. The administrative experience period for this filing is January 2020 through November 2020. Those costs are allocated to groups either on a per-account basis, a per-member basis, or a per-contract basis, as appropriate. Transitional costs related to one-time events such as enabling full-time remote work, which will not recur in the future, were removed. The approved administrative charge for 2021 was \$53.82 PMPM. The original filing proposed an average admin charge of \$61.50, but this was the result of an error that was corrected during L&E's review. The proposed admin charge is \$54.71 PMPM. This increase of \$0.89 PMPM is attributable to the following factors:
 - *Updated Experience:* The actual 2020 administrative costs differed from anticipated in the prior filing. Reflecting this updated information resulted in a decrease to admin costs of about \$2.52 PMPM. This decrease in administrative cost flows through to the projected 2021 and 2022 administrative costs.
 - Decrease in Total BCBSVT Membership: BCBSVT is projecting a 6.2% decrease in overall
 membership across all lines of business. Since fixed expenses will be distributed among a smaller
 pool of members, an increase in the total PMPM administrative charges results. While it is not
 practicable for BCBSVT to reduce staffing as rapidly as enrollment has fallen, BCBSVT has
 developed the administrative charge as if they did. Under the assumption that 30% of costs are
 variable costs, this means that the impact on administrative costs is an increase of about 4.4%, or
 \$2.24 PMPM.
 - Administrative Cost Inflation: The proposed administrative costs will be incurred in 2021 and 2022. The assumed cost inflation reflects the Company's assumption that wages and benefits will increase at 3.0%, while other operating costs and membership are expected to remain at current levels. This is consistent with the prior filing. The administrative cost inflation results in an increase to the administrative cost PMPM of about \$1.17.

⁹ The Company uses the Benefit Relativity models to calculate the impact of cost sharing for each of the plans that they offer.



The past few years have exhibited a notable increase in administrative costs for this block. In particular, the 2019 Q3 Large Group administrative charge was \$40.85 PMPM. The 34% increase since that time is split about evenly between a 15% increase to total expenses and a 16% change from the reduced enrollment and change in mix of BCBSVT's enrolled membership. According to BCBSVT, the increased expense is driven by the following factors:

- A new operating system for enrollment, billing, and claims processing, which went live in 2019:
- New customer relationship management software;
- Enhancements to the company's IT security program; and
- Inflationary increases in vendor costs.

The process for reflecting the most recent information available is actuarially sound. Additionally, the Company did not reflect the full change in enrollment when calculating the increase in fixed cost per member. That is, a higher increase to administrative costs would be supportable based on the methodology described above.

The premiums will also include allowances for the following state mandates and assessments. Some values are provisional until the relevant agencies announce the final assessment values.

- The Vermont Vaccine Purchasing Program is estimated to cost \$10.60 PMPM per child and \$1.09 PMPM per adult.
- The New Hampshire Purchasing Program is expected to cost \$6.25 PMPM for each child that is a resident of New Hampshire.
- New York State Health Reform Act applies an assessment based on county of residence within New York.
- The Maine Guaranteed Access Reinsurance Association produces an assessment of \$4.00 PMPM per Maine resident.
- The Vermont Health Care Claims Tax of 0.999% of claims for all Vermont residents.
- The Health IT-Fund assessment of 0.199% has been routinely extended, so the current rate manual reflects a continued assessment. It will be updated if new information becomes available.
- BCBSVT projects that the total assessments for Vermont Blueprint for Health will be \$2.77 PMPM for the Community Health Team and \$3.20 for the PCMH team. Actual rates charged will reflect any updates made to the Blueprint Manual in renewals.
- The Green Mountain Care Board assess a billback, projected to be \$2.31 PMPM for the coverage period.

The admin assumptions used in the each of the components appear to be reasonable and appropriate.

7. Federal Fees: H.R.1865 - Further Consolidated Appropriations Act repealed the ACA's Section 9010 insurer fee for 2021. Therefore, no insurer fee is included in the proposed rates.

The projected Patient-Centered Outcomes Research Institute (PCORI) fee is \$0.24 PMPM. This value is reasonable.

8. Contribution to Reserves (CTR): The proposed CTR is 1.5% for BCBSVT Insured Large Groups and 0.375% for Cost Plus Groups. For TVHP insured groups, the proposed CTR is 2.0%. Last year, the filed CTR was 1.5% for all insured large groups. The increase for TVHP groups is related to the different tax treatment of BCBSVT and TVHP. As a result of the Tax Cuts and Jobs Act of 2017, BCBSVT is no longer subject to income tax. Because TVHP is subject to income tax, a higher pre-tax CTR is required to result in equivalent post-tax contributions to reserve.



L&E believes the proposed CTR is reasonable in order to maintain RBC levels in light of medical trend and provide an adequate margin over and above the minimum to keep appropriate RBC levels in the case of an adverse event without being excessive.

While L&E believes the proposed CTR is reasonable, reviewing the Company's current level of capital and surplus is beyond the scope of this review. Therefore, the results of the Department of Financial Regulation's Solvency Analysis should also be considered.

9. *Other Rate Manual Changes:* The Company made updates to the rating factors for stop loss reinsurance and for valuing different benefit designs. These changes should not impact the premiums for the block as a whole but are intended to more accurately reflect the variation in risk between groups by better mirroring benefit differences.

One change from last year's methodology is the introduction of factors reflecting the impact of drug benefit design on the generic dispensing rate. Groups with lower generic copays and/or higher brand copays are assumed to have consequently higher generic utilization and lower brand utilization. This change does not have an overall impact on premiums across all groups, but merely attempts to better align premiums between different groups with the benefit value of their different plan designs. This change appears reasonable.

Costs associated with treating COVID-19 are isolated from the experience and are not included in the manual rate or a group's experience at renewal. This means that any increase to costs from COVID-19 will not be carried forward into premiums for future periods. L&E believes this is a reasonable approach.

Additionally, groups renewing in the next year will have experience which is affected by COVID-19 in indirect ways. In spring 2020, costs were understated as members deferred care. Then, in Fall 2020, some of that deferred care occurred, resulting in an increase in utilization. When a group's experience is considered at renewal, the experience will be adjusted to BCBSVT's estimate of what the claims would have been in the absence of COVID. This adjustment is based on extensive modeling performed by BCBSVT and presented to the DFR in December 2020.

L&E reviewed this deferred care adjustment and believe it is reasonable. Because it adjusts experience back to the level anticipated in the absence of COVID, it should result in no net change to the premiums from COVID.

Recommendation

With the proposed correction to the projected administrative charge, L&E believes that this filing does not produce rates that are excessive, inadequate, or unfairly discriminatory. Therefore, L&E recommends that the Board approve the filing as revised, resulting in an anticipated average premium change of -1.7%.



Sincerely,

Kevin Ruggeberg, FSA, MAAA

Consulting Actuary Lewis & Ellis, Inc.

Jacquelile B. Lee, FSA, MAAA Vice President & Principal

Lewis & Ellis, Inc.

David M. Dillon, FSA, MAAA Vice President & Principal

Lewis & Ellis, Inc.

ASOP 41 Disclosures

The Actuarial Standards Board (ASB), vested by the U.S.-based actuarial organizations¹⁰, promulgates actuarial standards of practice (ASOPs) for use by actuaries when providing professional services in the United States.

Each of these organizations requires its members, through its Code of Professional Conduct¹¹, to observe the ASOPs of the ASB when practicing in the United States. ASOP 41 provides guidance to actuaries with respect to actuarial communications and requires certain disclosures which are contained in the following.

Identification of the Responsible Actuary

The responsible actuaries are:

- Kevin Ruggeberg, FSA, MAAA, Consulting Actuary at Lewis & Ellis, Inc. (L&E).
- Jacqueline B. Lee, FSA, MAAA, Vice President & Principal at Lewis & Ellis, Inc. (L&E).
- David M. Dillon, FSA, MAAA, MS, Vice President & Principal at Lewis & Ellis, Inc. (L&E).

These actuaries are available to provide supplementary information and explanation. The actuaries also acknowledge that they may be acting as an advocate.

Identification of Actuarial Documents

The date of this document is April 12, 2021. The date (a.k.a. "latest information date") through which data or other information has been considered in performing this analysis is April 12, 2021.

Disclosures in Actuarial Reports

- The contents of this report are intended for the use of the Green Mountain Care Board. The authors of this report are aware that it will be distributed to third parties. Any third party with access to this report acknowledges, as a condition of receipt, that they cannot bring suit, claim, or action against L&E, under any theory of law, related in any way to this material.
- Lewis & Ellis Inc. is financially and organizationally independent from the health insurance issuers whose rate filings were reviewed. There is nothing that would impair or seem to impair the objectivity of the work.
- The purpose of this report is to assist the Board in assessing whether to approve, modify, or disapprove the rate filing.
- The responsible actuaries identified above are qualified as specified in the Qualification Standards of the American Academy of Actuaries.
- Lewis & Ellis has reviewed the data provided by the issuers for reasonableness, but L&E has not
 audited it. L&E nor the responsible actuaries assume responsibility for these items that may have a
 material impact on the analysis. To the extent that there are material inaccuracies in,
 misrepresentations in, or lack of adequate disclosure by the data, the results may be accordingly
 affected.
- L&E is not aware of any subsequent events that may have a material effect on the findings.
- There are no other documents or files that accompany this report.
- The findings of this report are enclosed herein.

Actuarial Findings

The actuarial findings of the report can be found in the body of this report.

¹¹ These organizations adopted identical *Codes of Professional Conduct* effective January 1, 2001.



¹⁰ The American Academy of Actuaries (Academy), the American Society of Pension Professionals and Actuaries, the Casualty Actuarial Society, the Conference of Consulting Actuaries, and the Society of Actuaries.

Methods, Procedures, Assumptions, and Data

The methods, procedures, assumptions and data used by the actuary can be found in body of this report.

Assumptions or Methods Prescribed by Law

This report was prepared as prescribed by applicable law, statues, regulations and other legally binding authority.

Responsibility for Assumptions and Methods

The actuaries do not disclaim responsibility for material assumptions or methods.

Deviation from the Guidance of an ASOP

The actuaries have not deviated materially from the guidance set forth in an applicable ASOP.

